AMENDMENTS

In the Claims:

1. (Currently Amended) An intervertebral disc prosthesis, comprising two cover plates and a prosthesis core, the prosthesis core being connected to one of the cover plates by complementary undercut connection profiles on the one cover plate and the prosthesis core,

wherein the connection profile on the prosthesis core is disposed on a leading edge and two lateral edges relative to an implanted position of the prosthesis, the leading edge having a triangular configuration with a single tip projecting outward beyond the lateral edges,

the leading edge comprising a pair of first profile sections being substantially straight and forming sides of the triangular configuration that meet at an angle not greater than 150°, the lateral edges comprising a pair of second profile sections being arranged in an anteroposterior direction relative to the implanted position, and

wherein the connection profile on the one cover plate has a complementary triangular configuration with a single tip projecting outward beyond lateral edges.

- 2. (Canceled)
- 3. (Previously Presented) The intervertebral disc prosthesis according to claim 1, wherein the prosthesis core is held in engagement with the one cover plate by an engaging structure arranged on a ventral side of the prosthesis core and the one cover plate relative to the implanted position.
 - 4-5. (Canceled)